Tianxia Xiao

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EDUCATION

Princeton University (Expected) Feb 2023

- Ph.D. in Chemistry (GPA:3.6/4.0)
- Quantitative courses: Quantitative Methods in Molecular Biology, Statistical Modeling and Analysis of Neural Data, Numerical Methods for Scientific Computing, Mathematics for Machine Learning

University of California, Berkeley May 2017

- B.Sc. double major in *Environmental Economics and Policy* and *Molecular Toxicology* (GPA:3.9/4.0)
- Magna cum laude, member of Phi Beta Kappa and Kappa Alpha Pi
- Entrepreneurship courses: Economics of Innovation and Intellectual Property, Principle of Drug Action

SKILLS

Data Analysis and Visualization, Python (numpy, pandas, matplotlib, seaborn, scikit-learn), LaTeX

RESEARCH EXPERIENCE

Rabinowitz Lab, Princeton University, *Graduate Research Assistant* Nov 2017 – Present

- Quantitatively model metabolic pathways of yeasts for synthetic biology applications in renewable energy.
- Create solutions for yeasts to produce high-value chemicals at low economic and environmental costs.
- Coordinate with Graduate Researchers, Post-docs and PIs in multi-omics analysis and metabolic engineering.
- Manage and engage in multiple research projects throughout the five stages of project life cycles.
- Deliver scientific presentations to hundreds of scholars across five research institutions monthly.

TechUnited: NJ, *Princeton GradFUTURES Social Impact Fellow* Mar 2021 – Jun 2021

- Partnered with executives from NJ Edge and NJ EDA in project developments and milestone deliveries.
- Developed a data analysis framework for the survey results on business development and innovations.
- Presented a government internal report representing the concerns of hundreds of NJ entrepreneurs.

ENTREPRENEUR EXPERIENCE

YetoFood, *Founder & Team Leader* Dec 2020 – Sep 2021

- Won funding from the entrepreneur Lab Accelerator at Princeton University (the only all-female Ph.D. team).
- Created a new keto-friendly food product at lower economic and environmental costs.
- Earned 80% positive feedback rate on the pilot product via targeted crowd-sourcing to 100 early adopters.

Scholarly Communication Workshop, *Founder & Co-facilitator* Jun 2019 – Jun 2020

- Won a student-initiated professional development grant from the Graduate School as the top 1 proposal.
- Recruited a multi-discipline team (Humanities, Science, Engineering) to design a series of four workshops.
- Organized workshops for hundreds of scholars to communicate their scholarly experience in social settings.
- Collaborated with the McGraw Center for Teaching and Learning in workshop design and delivery.

Association of Chinese Students and Scholars, *Marketing Director* May 2019 – Jun 2020

- Led a new marketing team and achieved highest WeChat subscriber base growth in five years (+240% YoY).
- Collaborated with campus stakeholders to promote events weekly reaching thousands of audience.
- Co-founded a COVID-19 philanthropy project that raised over $20,000 in donations to ameliorate medical supply shortages in Wuhan, China, and then Princeton, USA (reached five major hospitals in total).

PUBLICATION

[1] **Xiao, T.**, Khan, A., Shen, Y., Chen, L., Rabinowitz, J. D. (2021). "Glucose feeds the TCA cycle via environmental ethanol in fermenting yeast" *Nature Chemical Biology*, **In Review**.

[2] Dinh, H. V., Suthers, P. F., Chan, S., Shen, Y., **Xiao, T.**, Deewan, A., Jagtap, S. S., Zhao, H., Rao, C. V., Rabinowitz, J. D., & Maranas, C. D. (2019). "A comprehensive genome-scale model for Rhodosporidium toruloides IFO0880 accounting for functional genomics and phenotypic data" *Metabolic Engineering Communication*, **9**, e00101.

PRESENTATIONS

- Invited Speaker at "Voices of STEM", Council on Science and Technology (Princeton University) 2021
- Selected Speaker at "Research on the Road Virtual" (Top 3), Princeton University 2020

SCHOLARSHIPS

- NorCal Society of Toxicology Undergraduate Student Travel Award (Top 2) 2017
- NorCal Society of Environmental Toxicology and Chemistry Undergraduate Scholarship (Top 1) 2016
- The International Alliance of Research Universities Summer Program Scholarship 2014, 2016
  - Top 2 applicant to study *Chinese Economics* and *International Relations* at Peking University
  - Top 1 applicant to study *World Food System Center Summer School* at ETH Zurich